

Please **AMEND** the SPECIFICATION as follows:

Please amend page 14, line – page 15, line 2 as follows:

As described above with reference to FIG. 4, translation and routing tables may be updated when a packet is transmitted from within a VPN to a node outside the VPN. Figure 5 is a process flow diagram illustrating a method of processing a packet by a service provider network NAT device in accordance with various embodiments of the invention that is received from outside the VPN and addressed to a node inside the VPN. As will be described in further detail below, the NAT device may maintain a plurality of routing tables, each of the routing tables being associated with a different one of a plurality of VPNs at 502. The NAT device may receive a packet at 504, wherein the packet includes an IP source address and an IP destination address, as well as information indicating one of the plurality of routing tables to route the packet. As shown at block 506 502, the NAT device may perform NAT on the packet is performed. For instance, as described above, the MPLS tag may identify the network device responsible for performing NAT and routing the packet. In addition, the MPLS tag may also identify the VPN network. Thus, the VPN may be ascertained from the MPLS tag in order to identify an entry in a translation table such as that described above with reference to Figure 4. Once an entry in the translation table is identified using the IP source address (and/or port), the IP destination address (and/or port), and the VPN identifier obtained from the packet, NAT is performed on the packet using the contents of the translation table entry.

Once NAT has been performed, the packet may be routed. Specifically, one of the plurality of routing tables maintained by the service provider network device must be identified at block ~~504~~ 508 in order to route the packet. As described above, the VPN and/or VRF table identifier is identified in an MPLS tag in accordance with one embodiment. This

VPN identifier is also preferably stored in the translation table entry. Thus, the appropriate routing table associated with a specific VPN may be identified using the VPN identifier obtained from the MPLS tag or, alternatively, from the VPN identifier stored in the translation table entry previously used to perform NAT on the packet.

Upon identification of the routing table associated with the VPN, an entry in the routing table is identified using the IP source address and the IP destination address in the packet as shown at block 510 ~~506~~. The packet is then routed using the identified routing table entry at block 512 ~~508~~.

The NAT device may receive a default route to a network device providing one or more shared services at 514. For example, the default route may be advertised by the network device providing one or more shared services, where each of the shared services is available to each of the VPNs. The NAT device may then update each of the plurality of routing tables to include the default route to the network device providing one or more shared services available to each of the VPNs at 516.